Orthopedics Scenarios

Scenario 1 of 6:
Chief Complaint: Ankle pain

HPI: 52-year-old obese waitress presents to the office complaining of worsening of her flat feet. Pain in both ankles and feet is now affecting her ability to walk. She has tried OTC inserts without improvement.

Past Medical History: She smokes 1/2 PPD. Her only medication is a daily multivitamin.

Review of Systems: As above.

Physical Exam: Heel vargus is present (right greater than left), gastrocnemius is tight and palpation of medial ankles is painful. She can invert, evert, plantar flex and dorsiflex normally. When standing, the arch is decreased and she is unable to do a single heel lift on the right.

AP and lateral weight bearing x-rays show increased forefoot abduction through the talonavicular joint, increased hindfoot valgus, and collapse of the medial arch.

Assessment and Plan: Acquired right-sided flat foot deformity. Trial of custom orthotics and ankle braces.

Scenario 2 of 6:
Chief Complaint: Right wrist pain

HPI: 40-year-old right-handed female presents to urgent care clinic complaining of right wrist pain and deformity after falling from a step ladder onto her outstretched right hand.

Past Medical History: Unremarkable.

Review of Systems: As above.

Physical Exam: Swollen, ecchymotic wrist with a mild dorsally angulated deformity and intact skin. Although it is tender to palpation, there is no snuff box tenderness. The distal interphalangeal joints can be flexed and fingers abducted but extension of thumb and fingers is weak. Circulation and nerve sensation are intact.

AP of lateral wrist shows a fracture through the distal radioulnar joint with concomitant ulna styloid fracture, nondisplaced.

Assessment and Plan: Colles fracture of right radius with concomitant nondisplaced fracture of right ulna styloid. Closed reduction and casting.

Scenario 3 of 6:
Emergency Department Services

HPI: 28-year-old male was playing basketball when he suddenly felt a tug then a "snap" and intense pain in his left calf which caused him to drop to the floor.

Past Medical History: Unremarkable.

Review of Systems: As above.

Physical Exam: There is a tender palpable mass in his left calf with a soft tissue depression above the heel but no bony tenderness. There is increased dorsiflexion of the left foot with passive ROM and a positive Thompson test. He can't voluntarily plantarflex the foot.

ED Course: Plain x-rays of the lower extremity are negative for fracture. MRI was not done.

Clinical Impression: Spontaneous rupture of achilles tendon

Disposition: Admit for surgical repair and reattachment.

Scenario 4 of 6:
Emergency Department Services

HPI: 58-year-old male is brought to the ER by private car after sustaining a rattlesnake bite to his left lower lateral leg while out hiking approximately 2 hours ago. The patient is complaining of 10/10 pain in his left foot and calf, worse with even minimal ROM of the left foot. He denies any other trauma, no falls.

Past Medical History: Unremarkable.

Review of Systems: As above.

Physical Exam: The lower left leg is pale, swollen and firm below the knee, cool to the touch and without palpable dorsalis pedis or posterior tibial pulses.

Clinical Impression: Rattlesnack bite with acute compartment syndrome

Disposition: Admit for emergency fasciotomies.

Scenario 5 of 6:
Chief Complaint: Knee pain/swelling

HPI: 42-year-old obese male presents complaining of fever, chills with swelling, pain and redness of his left knee progressive over the last 24 hours. He is now unable to bear weight on the knee. He denies any recent trauma or previous knee injury or surgery.

Past Medical History: Significant for Type 2 diabetes.

Social History: Significant for chewing tobacco.

Review of Systems: As above.

Physical Exam: Temp.= 101.8, BP= 135/88, P= 110, RR= 18. The left knee has significant swelling with erythema, warmth and diffuse tenderness with limited ROM.

Knee x-rays show an effusion but are negative for fracture. Laboratory studies show WBC = 18, ESR = 52 CRP = 120. Aspirated joint fluid is cloudy, WBC = 52,000 with >70 PMN, gram stain is positive. Culture is pending.

Assessment and Plan: Septic left knee - admit, emergency I&D. Initiate broad spectrum antibiotics.

Scenario 6 of 6:
Emergency Department Services

HPI: 81-year-old thin white female presents to the ER via ambulance complaining of severe left groin pain after slipping and falling onto her left hip at home. She attempted to get up with assistance but was unable to bear weight on her left leg.

Past Medical History: Unremarkable.

Review of Systems: As above.

Physical Exam: Bruising over the left trochanter and the left leg in slight external rotation. She can flex the ankle and foot but passive rotation of the left hip is painful. Sensation is intact, good pulses and capillary refill.

ED Course: AP of the left hip shows a fracture extending obliquely through the center of the femoral neck. The head of the femur is not displaced but impacted into the neck with a valgus deformity.

Clinical Impression: Midcervical fracture of left femur

Disposition: Admit for surgical repair.